

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

In response to the new restriction/election requirement, please note the following remarks:

With respect to paragraph 2a on page 2 of the Office Action, in view of the Examiner's comments it is noted that the term "homogeneous" has been replaced with the term --solid-- to more clearly convey the fact that the absorbing rod is solid rather than being hollow. As defined in Webster's Dictionary, a "homogeneous" item is one that has the same structure. In this regard, it is respectfully submitted that one of ordinary skill in the art would understand that the term "rod" when describing the absorbing rod would mean that the rod is not hollow. Thus, the absorbing rod is solid (and thus has a homogeneous structure) in the present invention as compared with the prior art wherein such is hollow. Further, in the specification, any tubular structure in the present invention that is hollow has been referred to as a "pipe" wherein a solid bar-like structure is recited as being a "rod". Accordingly to Webster's Ninth New Collegiate Dictionary, a copy of which is enclosed, the term "rod" is defined as a "slender bar", a "bar" is defined as a "solid piece" and a "solid" is defined as "being without internal cavity" or "non-interrupted by a break or opening". In contrast thereto, a pipe is defined as "a long tube or hollow body". Therefore, it is respectfully submitted that one of ordinary skill in the art would understand that a rod means a solid long body. In view of the

Applicant's attorney respectfully submits that neither the amendments made the specification as presently amended nor Claim 13 as previously submitted in the amendment dated October 10, 2002 nor as now amended include new matter.

With respect to paragraph 2b of the Office Action, line 7-8 on page 16 of the specification recites the phrase "Further, any material having a property to absorb the neutrons may be used instead of Boron or Boron compound", (as now amended). The same paragraph referred to by the Examiner in the Office Action instead merely states that instead of boron or boron compounds, and Ag-In-Cd alloy may be used as a substance for absorbing neutrons for PWR. Accordingly, it is believed that the amendment to page 16 is helpful to overcome this matter.

With respect to paragraph 2c, in view of the statements set forth hereinabove and the explanation as to why no new matter has been added in the amendment filed October 10, 2002, it is submitted that this portion of the Office Action has been properly responded to.

With regard to paragraph 3 of the Office Action, Applicant's hereby provisionally elect species A (PWR) corresponding to both Claims 13 and 14, it being noted that Claim 13 is believed by Applicants to be generic.

With respect to paragraph 4 of the Office Action, Applicant's also provisionally elect species b (boron compound) corresponding to both Claims 13 and 14, it again being noted that Claim 13 is believed to be generic.

As for paragraph 5 of the Office Action, it is believed that the Examiner has not correctly interpreted the meaning of the claims. For example, Claim 13 recites the limitation “formed by adding a powder boron or a boron compound having a neutron absorbing performance to aluminum or an aluminum powder”.

In this regard, it is submitted that the Examiner has misinterpreted the phrase “absorbing performance to aluminum or an aluminum powder” as meaning an “absorbing performance comparable to aluminum or an aluminum alloy powder”. However, this limitation in Claim 13 is actually intended to mean forming by adding, to aluminum or an aluminum alloy powder, powdered boron or a boron compound having a neutron absorbing performance.

According, Claim 13 has been appropriately amended for closer compliance with Applicants intended claiming of the invention.

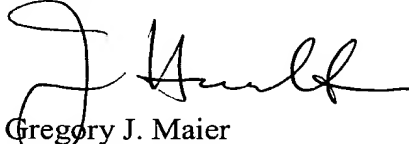
In view of the foregoing, it is submitted with respect to paragraphs 6 and 7 of the Office Action, Applicants are presently unable to make the election required by the Examiner and therefore request reconsideration of this requirement or to be given an explanation as to why it is possible to make such election.

As for paragraph 7 of the Office Action, Applicants hereby elect B_4C as the boron compound upon election of species b corresponding to both Claims 13 and 14.

In view of the foregoing and in view of the remarks presented here and above, an early and favorable Office Action is believed to be in order and the same is hereby respectfully requested.

Respectfully submitted,

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IN THE SPECIFICATION

Please amend paragraph, page 16, beginning at line 8 as follows:

Further, any material having a property to absorb the neutrons may be [uses] used instead of boron or boron compound. That is, Cd, Hf, or rare earth elements having a bigger neutron absorbing cross section may be used. For example, boron or boron compound are used in case of BWR, however, Ag-In-Cd compound are used in case of PWR. In the Ag-In-Cd compound, it is general that In is 15 weight present and Cd is 5 weight present. Further, carbides such as Eu, Sm, Gd may be used.

Please amend paragraph, page 25, beginning at line 6 as follows:

On the suspension plate 60, an optical fiber 71 is wound through a take-up unit 73 corresponding to the vertical motion of the lower end plate 62. The optical fiber 71 penetrates the through-hole 76 of the upper end [plate61] plate 61, and extends up to an imaging whole 94 of the lower end plate 62. At the leading end of the optical fiber 71, there is a lens 72 of the optical fiber 71, and the lens 72 is directed downward through the imaging whole 94. A weight 91 is provided at the leading end of the optical fiber 71, and the lens 72 of the optical fiber 71 is pressed, so that the image may be stably taken. The other end of the optical fiber 71 is connected to the imaging unit not shown through the take-up unit 73, and the image near the lens 72 is taken by the camera or the like.

IN THE CLAIMS

Please amend claim 13 to read as follows:

13. (Amended) An absorbing rod which is to be inserted into a control rod guide pip of bent fuel assemblies or a measuring pipe, said absorbing rod comprising a [homogeneous] solid structure comprising one of an aluminum composite material and an aluminum alloy formed by adding, to aluminum or an aluminum alloy powder, a powdered boron or a boron compound having a neutron absorbing performance [to aluminum or an aluminum alloy powder], said absorbing rod being insertable into one of said control rod guide pipe and said measuring pipe when transporting spent fuel assemblies stored in casket.

dent of the oxygen of the air, and is used esp. for the propulsion of a missile (as a bomb or shell) or a vehicle (as an airplane) **propelled bomb, missile, or projectile**

rocket \ˈrɑk-ət/ *n* (1860) 1: to rise up swiftly, spectacularly with force 2: to travel rapidly in or as if in a rocket **rocket-propelled bomb** *n* (ca. 1895) 1: an aerial bomb designed for release by means of or as if by a rocket

rocket altituder *n* (ca. 1930) 1: an altitude and equipped with a rocket apparatus for giving it additional momentum 2: a rocket-propelled bomb launched from the ground

rocket-eater \ˈrɑk-ə-ˈti(ə)r/ *n* (1832) 1: one who fires, pilots, or launches a rocket 2: a scientist who specializes in rocketry

rocket plane *n* (1932) : an airplane propelled by rockets or armed with rocket launchers

rocket-etry \ˈrɑk-ə-tre/ *n* (1930) : the study of, experimentation in, or use of rockets

rocket ship *n* (1927) : a rocket-propelled craft capable of traveling beyond the earth's atmosphere

rocket sled *n* (1954) : a rocket-propelled vehicle that runs on a single rail and that is used esp. in aeronautics experimentation

rock-fall \ˈrɑk-ˌfɒl/ *n* (1924) : a mass of falling or fallen rocks

rock-fish \-ˌfɪʃ/ *n* (1605) : any of various important market fish that live among rocks or on rocky bottoms: as a 1: any of numerous paenid fishes (esp. genus *Sebastes*) b: STRIPED BASS c: any of groupers

rock garden *n* (1836) : a garden laid out among rocks or decorated with rocks and adapted for the growth of particular kinds of plants (as pinces)

rock hind *n* (ca. 1867) : any of various spotted grouper-like fishes found about rocky coasts or reefs

rock hound *n* (1915) 1: a specialist in geology; esp.: one who searches for oil 2: an amateur rock and mineral collector — **rock-hound** \ˈrɑk-ˌhaʊn-dɪŋ/ *n*

rock-i-ness \ˈrɑk-ē-nəs/ *n* (ca. 1611) : the quality or state of being rocky

rocking chair *n* (1766) : a chair mounted on rockers

rocking horse *n* (1724) : a toy horse mounted on rockers — **rocking-hobbyhorse**

rock-ling \ˈrɑk-ˌlɪŋ/ *n* (1602) : any of several small rather elongated marine fishes (family Gobiidae)

rock lobster *n* (Ca. 1884) 1: SPINY LOBSTER 2: the flesh of a lobster esp. when canned or frozen for use as food

rock maple *n* (1752) : a sugar maple (*Acer saccharum*)

rock 'n' roll \ˈrɑk-ˌn-ˈrɒl/ *n* roller var of ROCK AND ROLL

rock oil *n* (1668) : PETROLEUM

rock on *n* (1953) : a small rocket or balloon (1953) : a small rocket carried to a high altitude by a balloon and then fired

rock pigeon *n* (ca. 1611) : ROCK DOVE

rock rabbit *n* (1840) 1: HYRAX 2: PIKA

rock-ribbed \ˈrɑk-ˌrɪb-d/ *adj* (1776) 1: ROCKY 2: firm and inflexible in doctrine or integrity (a ~ conservative community — John Hay) 3: rocky

rock-rose \ˈrɑk-ˌrɒz/ *n* (ca. 1731) : any of various shrubs or herbs (family Cistaceae, the rockrose family) with simple entire leaves and a capsular fruit

rock salt *n* (1707) : common salt occurring in solid form (as a rock) also : salt artificially prepared in large crystals or masses

rock-shaft \ˈrɑk-ˌʃɑft/ *n* (ca. 1864) : a shaft that oscillates on its axis instead of revolving

rock tripe *n* (1854) : any of various dark leathery umbiliciferous lichens (as of the genus *Umbilicaria*) that are widely distributed in rocks in boreal and alpine areas and that are sometimes used as a food

rock wallaby *n* (1841) : any of various medium-sized kangaroos (family Macropodidae)

rock-weed \ˈrɑk-ˌwɛd/ *n* (1626) : any of various coarse brownish-green algae (family Fucales, esp. genera *Fucus* and *Ascophyllum*) growing attached to rocks

rock wool *n* (ca. 1909) : mineral wool made by blowing glass through molten rock (as limestone or siliceous rock) or through a porous material and used chiefly for heat and sound insulation

rocky \ˈrɑk-ē/ *adj* rock-ier, -est [ˈrɒk] (15c) 1: abounding in or consisting of rocks 2: difficult to impress or affect : INDETERMINATE 3: firmly held : STEADFAST

rocky adj rock-ier, -est [ˈrɒk] (1737) 1: UNSTABLE 2: UNSTABLE 3: physically upset (as from drinking excessively) 3: marked by difficulties : DIFFICULT (a financially ~ year — Michael Murray) (1900)

Rocky Mountain sheep *n* [Rocky mountains, No. America] (1800)

HORN

Rocky Mountain spotted fever *n* (1903) : an acute bacterial disease characterized by chills, fever, prostration, pains in muscles and joints, and a red to purple eruption and transmitted by the bite of a tick (*Dermacentor andersoni*)

ro-co-co \rə-ˈkɒ-ˌkɒ/ (kɒ, rɒ-kɒ-kɒ) *n* (1840) : rococo work or style

rococo *adj* [F. irreg. fr. *rocaille* rock work, fr. *roc* rock, *co* -like] (1841) 1: of, relating to, or in the style of, the 18th century characterized by fanciful, ornate, and elaborate forms and elaborate ornamentation 2: of or relating to the 18th century musical style marked by light gay ornamentation and structure from thorough-bass and polyphony 2: excessively intricate

rod \rɒd/ *n* [ME, fr. OE *rodd*; akin to ON *rudda* club] (15c) 1: a straight slender stick growing on or cut from a tree 2: OSIER (3) : a stick or bundle of twigs used to punish or restrain 4: a shepherd's cudgel (5) : a pole with a line and floats attached for fishing (b) 1: a slender bar (as of wood or metal) used as a staff for measuring (3) : SCEPTER also : a staff carried as a badge of office (as of marshal) 2: a unit of length 3: a unit of weight table b : a square rod 3 : any of the long rod-shaped bacterium 5 slang : PISTOL — **rod-less** \-ˌlɪs/ *adj*

rode *past* and **chiefly dial past part** of **RIDE**

rodent \ˈrɒd-ˌnt/ *n* [deriv. of L *rodent*, *rodens* prp. of *rodere* to gnaw] (1859) : any of an order (Rodentia) of gnawing mammals (as a mouse, a squirrel, or a beaver)

[illegible]

solfège /sɒl-'feɪʒ/ (F, fr. It *solfeggio*) [ca. 1903] 1: the application of the sol-fa syllables to a musical scale or to a melody 2: a system of exercise esp. using sol-fa syllables; also: practice in sight-reading music using the sol-fa syllables
sol-feg-gio /səl-'fej-(ə)-dō/ [It, fr. *sol-fa*] (1774): **SOLFEGE**
sol-jel /səl-'jel-, səl-'adj/ (ca. 1925): involving alternation between sol and si and geists
solid *pl* of **SOLO**
solid-i-ty /sə-'lis-ət-/ vb [ME *solicitus* to disturb, take charge of, etc.]
solicitor, fr. L *solicitare* to disturb, fr. *solicitus* anxious, fr. *sol-* more (cf. *sol*).
more at **SAFE**, **HIGHT** ~ **W** (1509) 1 a: to make petition to: ENTREAT b: to approach with request or plea 2: to strongly urge (as cause) 3 a: to entice or lure esp. into evil b: to proposition (esp. one) esp. as or in the character of a prostitute 4: to try to obtain usu. urgent requests or pleas ~ vi 1: to make solicitation
TUNE 2 of a prostitute: to offer to have sexual relations with someone for money *syn* see **ASK**
so-li-ci-tant /sə-'lis-ət-ənt/ n (1802): one who solicits
so-li-ci-ta-tion /sə-'lis-ət-'tā-shən/ n (1500) 1: the practice or act in instance of soliciting; esp.: ENTREATE, IMPORTUNITY 2: a moving drawing force; INCITEMENT, ALUREMENT
so-li-ci-tor /sə-'lis-ət-, 'lis-'tər/ n (15c) 1: one that solicits 2: an agent that solicits (as contributions to charity) 3: a British lawyer who advises clients, represents them in the lower courts, and presents cases for barristers to try in higher courts 3: the chief law officer of a municipality, county, or government department — **so-li-ci-to-ry**, -ship n
solicitor general n, *pl* **solicitors general** (1647): a law officer appointed primarily to assist an attorney general
so-li-ci-tude /sə-'lis-ət-, 'lis-'tsəd/ adj [L *solicitus*] (1563) 1: manifesting or expressing solicitude (as ~ inquiry about his health) 2: full concern or apprehension (~ APPREHENSIVE ~ about the future) 3: meticulously careful (~ in matters of dress) 4: full of desire: EAGER ~
so-li-ci-tu-sly adv — **so-li-ci-tu-sness** n
so-li-ci-tu-ous /sə-'lis-ət-, ('y)l-id/ n (15c) 1 a: the state of being solicitous ~ ANXIETY b: attentive care and protectiveness; also: an attitude of solicitous concern or attention 2: a cause of care or concern
usu. used in pl. *syn* see **CARE**
'solid /səl-'dɪd/ adj [ME *solide*, fr. MF, fr. L *solidus* akin to Gk *σολῖδον* whole — more at **SAFE**] (14c) 1 a: being without an internal cavity (as ~ ball of rubber) b: (1) printed with minimum space between lines (2) joined without a hyphen (as compound) c: not interrupted by a break or opening (~ wall) 2: having, involving, or dealing with three dimensions (~ solidification) 3: of uniformity of color and coherent texture: not loose or spungy (~ PACT b: neither gaseous nor liquid 4: of good substantial quality (~ kind ~ comfort) as a: SOUND (~ reasons) b: made firmly (~ well ~ future) 5 a: having no break or interruption (~ hours ~ hours) b: UNANIMOUS (had the ~ support of his party) c: intimately friendly or associated (~ with his boss) 6 a: FRUGAL; also: well-established financially b: serious in purpose or character 7: of one substance or character; as a: entirely of one metal (gold containing the minimum of alloy necessary to impart hardness) (~ gold b: of a single color *syn* see **FIRM** — **so-lid-ly adv** — **so-lid-ness** n
solid n (15c) 1: a geometrical figure or element (as a cube or sphere) having three dimensions 2 a: a substance that does not flow perceptibly under moderate stress b: the part of a solution or suspension that when freed from solvent or suspending medium has the qualities of a solid — **usu.** used in pl. (milk ~) ~ 3: something that is solid: ~ a: a solid color b: a compound word whose members are joined together without a hyphen
solid adv /səl-'dɪd/ in a solid manner; also: UNANIMOUSLY
solid-dag-o /səl-'dɑ-gə-, 'dæg-(ə)/ n, *pl* -gəs [NL, fr. ML *solidago* herbs reputed to heal wounds, fr. *solidare* to make whole, fr. L *solidus* solid] (1771): a genus (*Solidago*) of chiefly N. Am. herbaceous composite herbs including the typical goldenrods
solid angle n (ca. 1704): the three-dimensional angular spread at the vertex of a cone measured by the area intercepted by the cone on a sphere whose center is the vertex of the cone
solid-da-rism /səl-'dɑ-riz-m/ n [*solidarity* + -ism] (ca. 1931)
DARITY — **so-li-dar-is-t** /-'ræst/ n — **so-li-dar-is-tic** /-'rɪs-ŋk/ adj
so-li-dar-i-ty /səl-'dɑ-rət-ē-/ n [F *solidarité*, fr. *solidaire* characterized by solidarity, fr. L *solidum* whole sum, fr. neut. of *solidus* solid] (1844): unity (as of a group or class) that produces or is based on common interests, objectives, and standards
solid geometry n (1733): a branch of geometry that deals with figures of three-dimensional space
so-lid-i-fy /sə-'lɪd-ɪf-/ vb -fed; -fy-ing vt (1799) 1: to make firm, compact, or hard 2: to make secure, substantial, or firmly fixed (the facts) ~ vi: to become solid, compact, or firm
so-lid-i-fi-ca-tion /-'lɪd-ɪ-fə-'kā-shən/ n
so-lid-i-ty /sə-'lɪd-ɪ-ə-/ n, *pl* -ties (1532) 1: the quality or state of being solid 2: something solid
solid-looking /səl-'dɪd-'lʊk-ɪŋ/ adj (1883): giving an impression of solid worth or substance (~ well-fed citizens solid conceived as former solid of revolution (1816): a mathematical solid conceived as formed by the revolution of a plane figure about an axis in its plane
solid-state adj (1950) 1: relating to the arrangement or behavior of solid material; esp.: relating to the arrangement or behavior of atoms, molecules, nucleons, electrons, and holes in the crystals of substances (as a semiconductor) or to the effect of crystal imperfections on the properties of a solid substance (~ physics) 2: utilizing the electric, magnetic, or photonic properties of solid materials; not utilizing electron tubes (as ~ stereo system)
so-li-de-us /səl-'dɪd-əs/ n, *pl* -ī (-dɪ-, -də/) [ME, fr. LL, fr. L *solidus* (14c) 1: an ancient Roman gold coin introduced by Constantine and used to the fall of the Byzantine Empire 2 [ML, shilling, fr. LL, *solidus* use as a symbol for shillings]: DIAGONAL 3
so-li-fluc-dion /sə-'lə-flək-shən/ n [L *solum* soil + ~ + *fluctio* flowing, fr. *fluctus*, pp. of *fluere* to flow — more at **FLOW**] (1916): the slow creeping of saturated fragmental material (as clay) down a slope; usu. occurs in regions of periglacial frost
so-lil-o-quist /sə-'lɪl-ə-kwɛst/ n (1804): one who soliloquizes

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